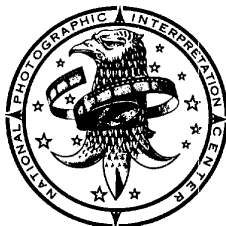


TOP SECRET

RCA-09/0014/69

25X1

Basic Imagery Interpretation Report



**NATIONAL
PHOTOGRAPHIC
INTERPRETATION
CENTER**

25X1

MOSCOW AIRFRAME PLANT FILI 23

**STRATEGIC WEAPONS INDUSTRIAL FACILITIES
USSR
JANUARY 1969**

Declass Review by NIMA / DoD

ARCHIVAL RECORD
PLEASE RETURN TO
AGENCY ARCHIVES

COPY NO. 106

9 PAGES
GROUP 1: EXCLUDED FROM
AUTOMATIC DOWNGRADING
AND DECLASSIFICATION

TOP SECRET

232764//

25X1

Approved For Release 2005/06/08 : CIA-RDP78T04563A000200010015-9

Approved For Release 2005/06/08 : CIA-RDP78T04563A000200010015-9

25X1

Jan. 1969

TIC

22932

25X1

TITLE	NPIC	SEC. CLASS.	LOCATION

NPIC

SEC. CLASS. LOCATION

--

25X1

Approved For Release 2005/06/08 : CIA-RDP78T04563A000200010015-9

25X1

INSTALLATION OR ACTIVITY NAME

Moskva Airframe Plant Fili 23

COUNTRY

UR

UTM COORDINATES

NA

GEOGRAPHIC COORDINATES

55-45-24N 037-29-26E

MAP REFERENCE

ACIC. USATC, Series 200, Sheet 0167-5, Scale 1:200,000

25X1A

25X1D

ABSTRACT

Moskva Airframe Plant Fili 23 is one of the largest airframe plants in the Soviet Union and one of the principal aerospace installations located in the Moscow area.

Plant 23 has been actively engaged in aircraft production. Production has included both heavy bombers and large helicopters.

25X1B

25X1D

25X1D

25X1D

The total floorspace of Plant 23 increased from approximately 2.3 million square feet in [redacted] to almost 3 million square feet [redacted] and amounted to approximately 4.7 million square feet [redacted].

INTRODUCTION

25X1A

25X1A

25X1A

25X1D

25X1D

Moscow Airframe Plant 23 is located on the west bank of the Moscow River (Figure 1), approximately 4.5 nautical miles (nm) west of the Kremlin. It is situated along the south side of Moscow/Fili Airfield [redacted]. Moscow Airframe Plant 30 [redacted] is located 2.5 nm northeast of Plant 23.

Airframe Plant 23 was built prior to World War II and was only lightly damaged as a result of aerial bombardment during the war. The reconstruction of damaged buildings and the completion of several large buildings first seen under construction [redacted] had been accomplished [redacted]. Plant 23 has developed into one of the largest airframe plants in the Soviet Union. Plant 23 has been actively involved in aircraft production [redacted].

25X1D

Moscow/Fili Aircraft serves primarily as a test and flyaway field. It has a serviceable concrete runway measuring approximately 4,600 by 290 feet and oriented in a west-southwest/east-northeast direction. The relatively short runway probably would not permit some of the aircraft testing usually conducted at an airframe plant; any potential extension of the runway is restricted at both ends by the Moscow River. The runway has been present since World War II, and it is now in a state of deterioration and will need major repairs if it is to continue as a test and flyaway field.

Related Installations

The Soviet aerospace industry has its largest concentration of installations in the Moscow area. All of the major aerospace installations in the general vicinity of Moscow have been listed in a recent report; 1/ many of these could be associated with Airframe Plant 23. A number of the aerospace and/or missile installations located in the suburbs of Moscow are annotated on the location map (Figure 1).

BASIC DESCRIPTION

Physical Features

Major facilities comprised in Airframe Plant 23 (Figures 2 and 3) are assembly buildings, shop buildings, administration and engineering buildings, and warehouses. A

25X1

large number of small utility, support, and miscellaneous buildings are scattered throughout the plant area, which encompasses approximately 450 acres including the adjacent airfield. Functional descriptions, dimensions, and construction chronology of these facilities are presented in Table 1.

The present floorspace of Plant 23 totals slightly over 4.7 million square feet, more than twice the amount of floorspace contained by the plant [REDACTED] The following tabulation shows the functional distribution of current floorspace at Plant 23:

<u>Functional Description</u>	<u>Floorspace (sq ft)</u>
Assembly bldgs	351,950
Assembly and shop bldgs	2,407,625
Shop bldgs	977,700
Admin and engineering bldgs	605,225
Warehouses	202,400
Utility, support, and miscellaneous bldgs	189,275
	<u>4,734,175</u>

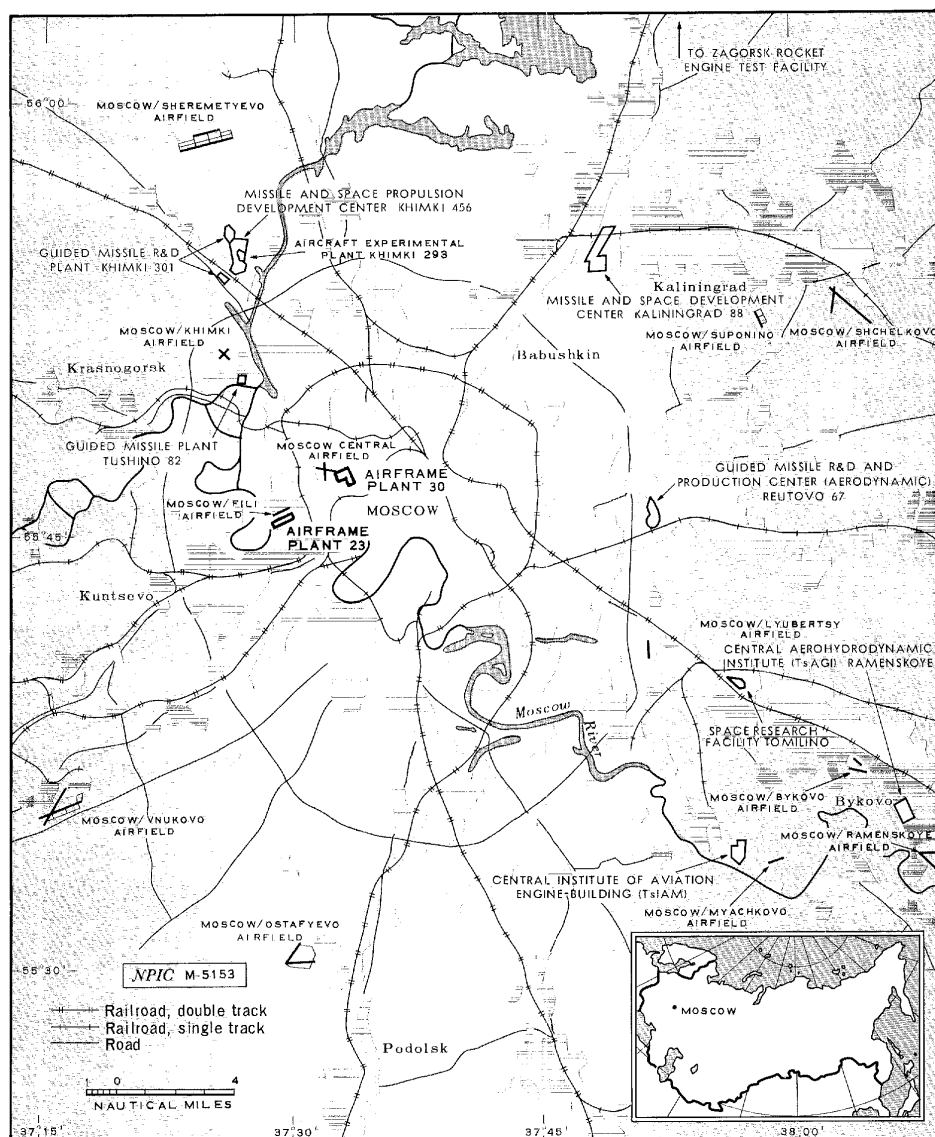


FIGURE 1. LOCATION MAP.

25X1D

Approved For Release 2005/06/08 : CIA-RDP78T04563A000200010015-9

Next 1 Page(s) In Document Exempt

Approved For Release 2005/06/08 : CIA-RDP78T04563A000200010015-9

25X1

TOP SECRET

Approved For Release 2005/06/08 : CIA-RDP78T04563A000200010015-9

25X1

Table 1. Structures in Moscow Airframe Plant 23 (Item numbers keyed to Figure 3)

Item	Probable Function	Dimensions (ft)			Roof Cover (sq ft)	Floorspace (sq ft)	Comments	Item	Probable Function	Dimensions (ft)			Roof Cover (sq ft)	Floorspace (sq ft)	Comments
		Length	Width	Height						Length	Width	Height			
1	Warehouse	220	40	--	8,800	8,800		59	Utility bldg	Irreg	--	4,900	4,900	Pumphouse serving 2 large (70 ft diam) prob. water tanks	
2	Shop bldg	200	160	--	32,000	32,000		60	Warehouse	330	40	15	13,200	13,200	
3	Shop bldg	Irreg	--	--	31,725	38,475		61	Warehouse	180	40	--	7,200	7,200	
a	Admin & engineering section	165	30	2 stories	--	--		62	Shop bldg	70	60	--	4,200	4,200	
4	Admin bldg	120	35	--	4,200	4,200		63, 64	Warehouses (2)	Various	--	--	10,600	10,600	
5	Admin bldg	120	35	--	4,200	4,200		65	Warehouse	135	45	--	6,075	6,075	
6	Admin bldg	115	35	--	4,025	4,025		66	U/I bldg	--	--	--	--	--	
7	Admin bldg	120	35	--	4,200	4,200		67	Steam plant	Irreg	20, 45	--	36,600	36,600	Significantly expanded
8	Admin bldg	Irreg	2 & 4 stories	--	33,450	32,850		68	POL storage	--	--	--	--	--	Rail served; 2 above-ground POL tanks (40 ft diam, 35 ft high) serving steam plant
a	Assembly & shop bldg	910	335	50	1,114,200	1,243,950		69	Shop bldg	85	55	--	4,675	4,675	
b	Assembly & shop section	850	320	40, 45	--	--		70	Utility bldg	90	40	--	3,600	3,600	
c	Admin & engineering section	465, 300	40	3 stories	--	--		71	Shop bldg	Irreg	--	--	57,400	77,000	
d	Admin & engineering section	465	165	40	--	--		a	Admin & engineering section	200	40	2 stories	--	--	
e	Admin & engineering section	465	45	3 stories	--	--		b	Admin & engineering section	145	40	3 stories	--	--	
f	Shop section	845	430	35	--	--		c	Shop section	200	145	35	--	--	
g	Admin & engineering section	220	30	2 stories	--	--		d	Shop section	160	60	35	--	--	
h	Admin & engineering section	Irreg	30	3 stories	--	--		72	Utility bldg	175	70	--	5,350	5,350	
i	Admin & engineering section	Irreg	30	1 story	--	--		73	Shop bldg	12,250	--	--	12,250	12,250	
10	Shop bldg	Irreg	30	--	31,675	31,675		74	Shop bldg	100	60	35	6,000	6,000	
11	Shop bldg	Irreg	--	--	10,225	10,225		75	Assembly & shop bldg	590	280	70	165,200	158,800	
12	Shop bldg	Irreg	--	--	6,750	6,750		a	Admin & engineering section	590	40	2 stories	--	--	
13	Shop bldg	Irreg	--	--	17,500	19,375		76	Assembly & shop bldg	Irreg	30	2 stories	--	--	
a	Admin & engineering section	75	25	1 story	--	--		b	Assembly & shop section	270	30	2 stories	--	--	
b	Shop section	75	25	2 stories	--	--		c	High-bay section	220	125	75	--	--	
c	Admin & engineering section	75	25	2 stories	--	--		77	Utility bldg	105	35	--	3,675	3,675	
14	Shop bldg	Irreg	--	--	15,350	17,250		78	Shop bldg	Irreg	--	--	2,600	3,000	
a	Admin & engineering section	95	29	2 stories	--	--		79	Shop bldg	Irreg	55	70	41,100	41,100	
15	Shop bldg	470	110	40	51,700	55,000		80	Shop bldg	Irreg	35	--	15,850	45,675	Currently being expanded
a	Admin & engineering section	170	30	2 stories	--	--		a	Admin & engineering section	Irreg	2 stories	--	--	--	
16	Shop bldg	Irreg	30	2 stories	--	--		81	Assembly & shop bldg	475	270	30	128,250	142,500	
a	Admin & engineering section	150	50	3 stories	--	--		a	Admin & engineering section	475	30	2 stories	--	--	
17	Shop bldg	440	170	--	74,800	80,800		82	Utility bldg	Irreg	--	--	3,950	3,950	
a	Admin & engineering section	100	30	2 stories	--	--		83	Shop bldg	290	60	--	17,400	17,400	
b	Admin & engineering section	100	30	2 stories	--	--		84	Assembly & shop bldg	Irreg	--	--	15,850	213,450	
c	Shop section	Irreg	35	--	--	--		a	Admin & engineering section	480	30	3 stories	--	--	
18	Shop bldg	215	25	2 stories	--	--		b	Assembly & shop section	480	165	50	--	--	
a	Admin & engineering section	165	30	2 stories	--	--		c	Admin & engineering section	450	30	3 stories	--	--	
19	Shop bldg	80	20	2 stories	--	--		d	Assembly & shop section	200	165	65	--	--	
a	Admin & engineering section	80	20	2 stories	--	--		85	Shop bldg	Irreg	--	--	4,200	4,200	
b	Admin & engineering section	80	20	2 stories	--	--		86	Shop bldg	Irreg	--	--	9,700	9,700	
c	Shop section	125	80	20	--	--		87	Shop bldg	80	70	--	5,600	5,600	
20, 21	Utility bldgs (2)	Various	--	--	12,150	12,150		88	Shop bldg	105	75	--	7,875	7,875	
22	U/I bldg	Various	--	--	--	--		89	Admin & engineering bldg	150	70	2 stories	--	--	
23, 25	Warehouses (3)	Various	--	--	16,425	16,425		a	Admin & engineering section	150	70	2 stories	--	--	
24, 27	Warehouses (2)	Various	--	--	13,725	13,725		b	Admin & engineering section	160	80	4 stories	--	--	
28	Warehouse	110	30	--	3,300	3,300		c	Admin section	295	165	50	--	--	
29	Warehouse	125	35	--	4,375	4,375		90	Admin & engineering bldg	Irreg	--	--	30,000	156,000	
30	Warehouse	205	50	--	10,250	10,250		a	Admin & engineering section	140	20	2 stories	--	--	
31	Warehouse	135	45	--	6,075	6,075		b	Engineering & lab section	180	65	4 stories	--	--	
32, 33	Warehouses (2)	205	45	--	9,150	15,450		c	Admin section	295	165	50	--	--	
34	U/I bldg	--	--	--	--	--		92	Assembly & checkout bldg	Irreg	--	--	80,600	87,800	
35	Assembly & shop bldg	Irreg	40	2 stories	201,625	226,625		93, 94	Warehouses (2)	Various	--	--	21,350	21,350	
a	Admin & engineering section	625	40	--	25,000	25,000		95	Assembly & shop bldg	530	480	--	254,400	283,200	
36	Warehouse	165	40	--	6,600	6,600		a	Admin & engineering section	480	30	2 stories	--	--	
37	Warehouse	Irreg	--	--	10,000	10,000		b	Admin & engineering section	480	30	2 stories	--	--	
38	Radar assembly & checkout area	--	--	--	--	--		c	Assembly & shop section	480	470	35	--	--	
39	U/I bldg	150	115	35	17,250	17,250		96	Warehouse	235	30	--	7,050	7,050	
40	Shop bldg	--	--	--	--	--		97	Shop bldg	240	155	25	37,200	42,000	
41	Shop bldg	Irreg	--	--	20,350	20,350		a	Admin & engineering bldg	240	30	2 stories	--	--	
42	Warehouse	135	40	--	5,400	5,400		b	Shop bldg	215	170	30	36,550	43,350	
43	Utility bldg	115	45	--	5,175	5,175		a	Admin & engineering section	170	40	2 stories	--	--	
44	U/I bldg	--	--	--	--	--		99	Warehouse	100	70	--	7,000	7,000	
45	Shop bldg	Irreg	--	--	3,500	3,500		100	Warehouse	140	40	--	5,600	5,600	
46	Utility bldg	105	45	--	4,725	4,725									
47	Warehouse	150	40	--	6,000	6,000									
48	Shop bldg	125	35	--	4,375	4,375									
49	Utility bldg	130	45	--	5,850	5,850									
50	Shop bldg	130	45	--	5,850	5,850									
51	Final assembly bldg	450	465	--	223,200	261,150									
a	Admin & engineering section	450	30	2 stories	--	--									
b	Admin & engineering section	450	30	2 stories	--	--									
c	Admin & engineering section	450	30	2 stories	--	--									
d	Final assembly section	450	405	75	--	--									
52	Shop bldg	455	70	40	31,850	31,850									
53	Utility bldg	Irreg	70	--	3,600	3,600									
54	Shop bldg	Irreg	30	--	114,900	132,500									
a	Admin & engineering section	220	40	3 stories	--	--									
55	Utility bldg	100	40	--	4,000	4,000									
56	Utility bldg	105	55	--	5,775	5,775									
57	Warehouse	160	40	--	6,400	6,400									
58	Admin & engineering bldg	530	60	5 stories	31,800	158,000									

*Considered complete when first observed.

TOP SECRET

Approved For Release 2005/06/08 : CIA-RDP78T04563A000200010015-9

25X1

25X1

TOP SECRET

The large and unique assembly and checkout building (Item 92, Figure 3) is considered one of the most significant facilities located at Plant 23. For descriptive purposes this building is divided into five parts, designated sections A, B, C, D, and E (inset to Figure 3). Sections A, B, and C were constructed [redacted] and sections D and E were added [redacted]. Sections A and E are two stories high and probably contain administration and engineering office space; they measure 190 and 170 by 20 feet respectively. Section B is an assembly section measuring approximately 190 by 160 feet by 40 feet high. Section C is an assembly and checkout section measuring approximately 180 by 135 feet by 85 feet high, and Section D is also an assembly and checkout section, measuring approximately 170 by 110 feet by 125 feet high. The exact function of this building is unknown; however, it could be used for assembly and testing of missiles or large missile components, such as fuel and oxidizer tanks.

Chronological Development

When first observed on [redacted] photography, Airframe Plant 23 consisted mainly of assembly buildings, shop buildings, administration and engineering buildings, and warehouses, with a total floorspace of approximately 2.3 million square feet. Most of these buildings are still in use today; however, many of them have undergone considerable expansion and modernization. Two shop buildings (Items 18 and 19) and a large assembly and shop building (Item 84) were observed under construction [redacted].

There is [redacted] the photographic coverage of Plant 23, between [redacted]. Approximately 630,000 square feet of floorspace were completed during this interval. The completion of those facilities first seen under construction [redacted] and the addition of a large assembly and shop building (Item 95) accounted for the major portion of this new floorspace. A large four-story administration and engineering building (Item 90) was observed in an early stage of construction and a large assembly and shop building (Item 81) was in a midstage of construction [redacted].

No photographic coverage was available [redacted] when the first usable [redacted] photography was obtained. By the latter date, approximately 650,000 square feet of floorspace had been added to the plant. This new floorspace resulted principally from the completion of two previously observed structures, the large assembly and shop building (Item 81) and the large administration and engineering building (Item 90), and the addition of two new ones, an engineering and laboratory building (Item 91) and the large assembly and checkout building (Item 92). Expansion of some of the pre-existing facilities also took place during this time period.

Approximately 600,000 square feet of floorspace were added to the plant [redacted]. The most significant of this new construction included the erection of a large assembly and shop building (Item 35) and the expansion of three major facilities (Items 9, 76, and 92).

[redacted] approximately 630,000 square feet of floorspace were added to Plant 23. The addition of a large assembly and shop building (Item 75), a shop building (Item 98), and a large five-story administration and engineering building (Item 58) accounted for most of the new floorspace.

The most recent construction activity observed at the plant is the construction of five new small buildings (Items 22, 34, 39, 44, and 66) and the expansion of two shop buildings (Items 40 and 80). These new facilities and additions are all in the early stages of construction and have not been included in any of the floorspace totals.

TOP SECRET

25X1

Production Activity

25X1D

25X1D

25X1D

Airframe Plant 23 has been actively engaged in aircraft production [redacted]. Production has included the BISON (M-4) heavy bomber and prototypes of the BOUNDER, a heavy bomber which never entered serial production. HOOK (MI-6) heavy helicopters were first observed at the plant [redacted] and varying numbers of HOOK were observed [redacted] there has been an almost complete absence of HOOK at Plant 23, indicating that they have been phased out of production.

25X1B

25X1D

[redacted] access to one of the final assembly bays has been blocked by construction of a small building, and a rail spur has been constructed into the other final assembly bay. In addition, another building (Item 44) is under construction on the taxiway which connects the final assembly building with the adjacent airfield. The completion of Item 44 will impede movement of aircraft to and from the plant area. This indicates that if Plant 23 is going to continue production of aircraft, final assembly would take place at another installation in the Moscow area.

A radar assembly and checkout area (Item 38) is located at the adjacent airfield, although it probably is not connected with production at Plant 23.

There are a large number of circular and/or ring-shaped objects located throughout the plant area. These objects cannot be identified, but they may be associated with production.

Essential Services

25X1D

25X1D

25X1D

Plant 23 is served by two main rail spurs which can easily be connected with all of the major Moscow rail systems. These rail spurs enter the east side of the plant; once inside the plant area they subdivide to form an extensive network of short spurs. Major facilities served by individual rail spurs include two large assembly and shop buildings (Items 9 and 35) and the steam plant (Item 67). Rolling stock observed at Plant 23 on photography of [redacted] included 25 long rail cars [redacted] 4 long flatcars (approximately 65 by 10 feet), 6 standard-size flatcars, 4 boxcars, and 4 switch engines. The interpretability of photographic coverage [redacted] does not permit identification of rolling stock by type.

Transportation services in addition to rail spurs and the adjacent airfield include a network of good all-weather roads and the nearby Moscow River which is a major navigable waterway.

Electric power is received from an unidentified source outside the plant, and the onsite steam plant (Item 67) supplies heat.

Security

Although there are no visible stringent security measures, the entire area occupied by the plant and airfield is surrounded by a wall and/or fence. The Moscow River forms a natural security barrier on three sides of the plant and airfield. The main entrance to the plant is adjacent to an administration building (Item 8). No guard towers are observed; however, all accesses have control points.

25X1D

Approved For Release 2005/06/08 : CIA-RDP78T04563A000200010015-9

REFERENCES (Continued)

MAPS OR CHARTS

ACIC. US Air Target Chart, Series 200, Sheet 0167-5, Scale 1:200,000

DOCUMENT

1. NPIC. [REDACTED] Index of Aerospace Installations in the Moscow Area, Feb 68 (TOP SECRET)

25X1
25X1

REQUIREMENT

COMIREX. 369-69

NPIC Project 210475

Approved For Release 2005/06/08 : CIA-RDP78T04563A000200010015-9

TOP SECRET

TOP SECRET